ABSTRACT

This invention is directed to a coated article having an increased useful lifespan, having a wear-resistant coating comprising a vitreous matrix material and metal coated superabrasive particles distributed therein. The superabrasive particles are coated with a protective metal coating selected from zinc, aluminum, aluminum-silicon alloy, titanium, chromium, nickel, silicon, tin, antimony, copper, iron, stainless steel, silver, alloys thereof, and mixtures thereof. The wear-resistant coating comprising coated superabrasive particles may be applied to the surface of an article by at least one process selected from electroless or electrolytic electroplating process, thermal spraying, and brazing.